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May 20, 1985

Mr. Ray Nye
U.S. Environmental
Protection Agency
Region X
1200 Sixth Avenue, M/S 532
Seattle, WA 98101

RECEIVED MAY 24 1985 AIR PROGRAMS

SUBJECT: Section 114 Request For Information - Broach Heater

Dear Mr. Nye:

On May 3, 1985, we received a Section 114 Request for Information from your agency regarding a request for retesting the stack performance of the Broach heater located at the Seawater Injection Plant (SIP) within the Prudhoe Bay Unit (PBU), Alaska. Pursuant to Section 114 of the Clean Air Act, ARCO Alaska, Inc. agrees to demonstrate compliance with PSD permit No. PSD-X82-01 by sampling the source emissions of the Broach heater. Testing of this unit is tentatively planned sometime during the week of August 5 through August 10 and will be done in conjunction with other compliance testing scheduled for this year within the PBU. Selection of a contractor to do the testing will take place in June. A formal test plan will then be developed and submitted in July.

While we agree to retest the heater in question, the Section 114 letter raised some concerns that need resolution prior to conducting the stack test. The main concern is that related to the discrepancy between the operational rate reported by Chemecology Corporation (140 percent) and the rate reported by the observer for EPA, Jack Paul (97.5 percent). We are in the process of verifying the he numbers internally and have asked Chemecology to do likewise. It is imperative that the derived operational rates are consistent prior to retesting.

It is important to note that the Broach heaters at the SIP do not normally operate. These units provide backup building heat. In October 1984, the operational status of the Broach heaters was downgraded from standby status to emergency status. The rationale for this change was that the booster (non-fired) Waste Heat Recovery Units (WHRU) provided more than enough building heat. As emergency equipment, the Broach heaters will be used in the rare instance that the SIP is down or a WHRU is out of service due to a failure. This also allows the heaters to be used for emergency freeze protection.

In order to conduct the performance test, the Broach heaters were used to provide process heat. Normally, these heaters only supply emergency building heat. Summertime testing, however, required that the heat be released and we decided to use it for process heat. In





order to provide sufficient process heat, both Broach heaters were required to operate above design rate during the test period.

As soon as we have verified the operational rate of the heater during the previous testing, we will inform you of our findings. There is a possibility that we may wish to have a meeting at that time to discuss the matter further.

Should you have any questions, please contact me at (907) 263-4307.

Sincerely,

J. A. Ives

Sr. Regulatory Compliance Engineer

JAI:cb:0175

cc: Doug Lowery, ADEC-Fairbanks

Leonard Verrelli, ADEC-Juneau